

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004573**Date Inspected:** 03-Nov-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1430**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei / Wang Sei Fa**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector was present during the times noted above for observations relative to the work being performed.

**Bay 2 – New Tower Shop**

This QA Inspector observed ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of longitudinal stiffener plate welds on WSD1-SA80C/E-1B. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint WSD1-SA77A/E-41 filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint WSD1-SA225A/H-61A filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint WSD1-SA49A/D-22A filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld

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joint ESD1-SA384A/D-2A filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint ESD1-SA376A/E-2B filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector observed ZMPC welding personnel performing Flux Core Arc Welding (FCAW) of interior corner splice plate welds on ESD1-SA355. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

This QA Inspector observed ZMPC welding personnel performing Flux Core Arc Welding (FCAW) of interior corner splice plate welds on ESD1-SA176. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

### Bay 1-Tower Shop

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint NSD1-SA22C/E-2 filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint NSD1-SA178C/D-9B filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector observed ZMPC welding personnel performing automated, in gantry, Flux Core Arc Welding (FCAW) of weld joints connecting longitudinal stiffener plates to skin plate SSD1-SA208D/E-5A. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

This QA Inspector observed ZMPC welding personnel performing automated, in gantry, Flux Core Arc Welding (FCAW) of weld joints connecting longitudinal stiffener plates to skin plate SSD1-SA208C/D-4B. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

### Tracking and Log Book

This QA Inspector reviewed the contract files and tracking logs for the Magnetic Particle Testing (MT), Ultrasonic Testing (UT), Welding Procedure Specifications (WPS), Procedure Qualification Records (PQR), and QC Inspector records for the deck panel repairs to date.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Josh Ishibashi, (858) 232-6799, who represents the Office of Structural Materials for your project.

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**Inspected By:** Clifford,William

Quality Assurance Inspector

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**Reviewed By:** Cuellar,Robert

QA Reviewer